

# *Agricultural Manitoba*

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¶ Province favored by nature  
with rich land, abundant rain-  
fall, and splendid climate.

¶ Good markets and plenty  
of cheap land.

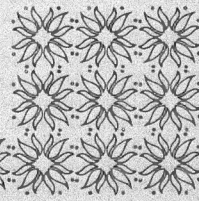
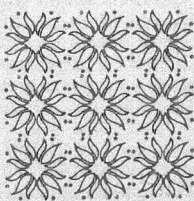


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EDITORIAL DEPARTMENT

**INDUSTRIAL BUREAU  
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THE territory now included in Manitoba is strongly agricultural in character, although it is fully expected that the vast area of northland recently added to the Province will develop some valuable mineral and forestry resources as well as fisheries of great capacity.

Topographically, the Province may be divided into two separate plains or steppes. The first of these extends from the eastern boundary westward to a ridge known in different regions as Pembina Mountain, Riding and Duck Mountains, and Porcupine Hills. This plain was originally a great lake which gradually receded from its former shores to what is now Lake Winnipeg, leaving Lake Manitoba and a few smaller bodies of water as basins for the drainage from the old lake bed. It is a fertile stretch with a marly clay sub-soil, and a black alluvial surface, the darkness of color being due, in the opinion of Dr. Dawson, to the frequent burning of grass.

In describing Manitoba, J. Macoun, Dominion Geologist, says:—"High above the Pembina Mountains the steppes and plateaux of the Riding and Duck Mountains rise in well defined succession with southern and western steppes; of these ranges the terraces are distinctly defined, and the north-east and north sides present a precipitous escarpment which is elevated fully 1,000 feet above Lake Winnipegosis, and more than 1,600 feet above sea level."

The northern portion of the Province, east of the mountain range, is covered, to a large extent, with wood timber. The wooded area commences in the south-eastern portion of the Province and continues in a line running north-west, striking first the southern point of Lake Winnipeg, then cutting Lake Manitoba about the centre, touching the Riding Mountains at their most southerly point and following north along the western boundary of the Duck Mountains and Porcupine Hills. North of this line the prairie is wooded, and all south of it is bare, with but slight exceptions.

#### The Famous Red River Valley

That portion of Manitoba known as the Red River Valley, extends from the eastern boundary of the Province westward to the Pembina Mountains, a ridge which at one time, formed the western shore line of the great lake already referred to. The summit of these hills is level for a distance of about five miles, till the foot of another terrace is reached. The summit of the second terrace is level with the Great Buffalo Plains, that stretch westward beyond the Manitoba boundary, and form a fertile tract, once the hunting ground of the Indian, but now the home of thousands of prosperous farmers. Close to the east of the ridge the land is marshy, and this circumstance has in some instances interfered with settlement.

Much of the central and northern parts of Manitoba present a limestone formation, indicated in these regions by out-croppings of large limestone slabs. There are also large belts of loose, irregular rocks, which are often found so close to the surface as to constitute a serious hindrance to cultivation. The early settlers in Manitoba soon found that the land was admirably suited for the purposes of agriculture. In the Red River Valley, the soil close to the river was found to contain a very high percentage of fine clay, and, although heavy to cultivate, proved to be very fertile. Passing from the river on either side, the soil was found to be more friable. In the north and west beyond the first ridge, the plain, in most places, consisted of a sandy or light clayey loam, capable of cultivation early in the springtime and suitable for the production of crops in a minimum amount of time. Although this region was more northerly than any which had been successfully cultivated in North America, it was found to be eminently productive. Manitoba has approximately twenty-four million acres suitable for agricultural purposes—not counting such of the new territory as may be good for farming—and about one-fifth of this has so far been brought under cultivation. Owing to the ease with which the prairie land can be broken and cropped, the new settler very quickly makes a home for himself, and often, within eighteen months, has a surplus of grain to dispose of. A hundred years ago the territory now included in the Province of Manitoba was the home of thousands of buffalo. Until the advent of the Canadian Pacific Railway, comparatively few settlers found their way into this country. Those who came had no inducement to grow more than would supply the home market.

The first attempts at farming in the Province were made by the Selkirk settlers, in 1816. This colony numbered two hundred and seventy people, who were chiefly Scotch, sent out by Lord Selkirk, but later the settlement included

some Irish, French and Swiss. These were intended to colonize the one hundred and ten thousand square miles of land granted to Lord Selkirk, by the Hudson's Bay Co. Each of the settlers bought one hundred acres for which he agreed to pay one dollar and twenty-five cents per acre.

#### **Experimental Farm in 1816**

In 1816, Lord Selkirk endeavored to assist the settlers by establishing an Experimental Farm, his ambition being to improve the breeds of cattle and horses, and to increase the yield of grain and dairy products. The Hudson's Bay Company also started an Experimental Farm about 1830, near Upper Fort Garry. Good buildings were erected and animals of the best breeds were imported, among them being a fine stallion from England, at a cost of \$1,500, and also a number of mares. These excellent animals greatly improved the breed of horses in the settlement. In 1832, a company was formed for the purpose of breeding large herds of cattle, for the sake of their hides and tallow, but owing to bad management, the enterprise failed. A few years later efforts were made to grow flax and hemp on a large scale, but, although these grew well, labor was too scarce to make the venture profitable. According to the census of 1849, the live stock in the country had increased to nearly 13,000, and over 6,000 acres were under cultivation. After the first Riel rebellion, settlers came pouring into the country and the acreage under cultivation increased rapidly. It is difficult at this distance of time to speak positively in regard to the first varieties of wheat used, but thirty-five years ago there were two varieties in cultivation—an early stiff-bearded variety not very productive, and a beardless kind having a hard red kernel, rather longer than Red Fyfe, and apparently of good milling value. The last mentioned was grown on the Brandon Experimental Farm for some years under the name of the "Old Red River Wheat." About 1880, the famous Red Fyfe Wheat was introduced into the West, a variety supposed to have originated on the Baltic coast. It is very productive, has a healthy, vigorous plant, the berry being hard and bright, the bran thin, and the gluten contents high, making its milling qualities unequalled. This variety has done more to keep up the reputation of the Province as a wheat-producing country than any other, and the greater proportion of the wheat exported is of this sort.

The acreage sown with barley in Manitoba is increasing very rapidly. Within six years the area occupied by this useful grain has doubled. The results of many years' experience show that the Chevalier varieties of two-rowed barley have not succeeded well. The ear seldom fills perfectly, and every year these varieties are more or less lodged, and they are late in maturing. The two-rowed sorts of the Duck-Bill type, such as Canadian Thorpe, are much stiffer in the straw, and generally speaking, the heads fill well. The six-rowed varieties are those best adapted for general cultivation. They ripen early and can be sown later than other grain, and even then will mature early enough to escape injury from autumn frosts. The straw is nearly always stiff and bright, and the ears well filled. Of these varieties the Mensury and Odessa are excellent. The average yield of Mensury barley on the Brandon Experimental Farm, for the five years ending 1907, was 63 bushels and 40 pounds per acre. Odessa gave an average return of 64 bushels and 40 pounds per acre for the same period.

#### **Big Crops of Barley**

Barley is largely grown as a cleansing crop. The method is to spread barn-yard manure on the stubble in spring, ploughing it under and sowing about the end of May. This practice gives a good crop and the land is left comparatively clean and ready for wheat the following year.

The yield of oats is usually very satisfactory throughout the Province, when proper care is given to their production. Although not so important as wheat, the sale of this grain for oatmeal and feeding purposes is increasing each year, and the price obtained is higher than in former years. A fairly pure and clean sample of heavy Manitoba oats is looked upon with much favor by oatmeal millers throughout the Dominion, and finds sale at remunerative prices. In some districts of this Province, where the soil is better adapted for oats than for wheat, that grain is grown almost exclusively. By careful selection of seed, and thorough cultivation, immense yields are obtained, and many farmers report an average of eighty bushels per acre over their entire farms. The "Banner" oat has been the favorite for a number of years. This is a thin hulled sort, of excellent quality and very productive. Other valuable varieties are "Abundance," "Ligowa" and "Newmarket." These are all white oats, and sell at a good figure for milling purposes. The place occupied by oats in the rotation of crops is

usually after wheat and just previous to either a barley crop or summer fallow. For this reason the returns per acre are not as large as they otherwise would be. On the Experimental Farm at Brandon, on summer fallowed land, without fertilizer, the average yield of "Banner" oats for the five years ending 1907, was 116 bushels and 4 pounds per acre. This is an indication of what can be accomplished on our rich soils with good cultivation.

In the newer settlements there is an abundant supply of natural hay on the lower lands and water meadows. For some years this supply will be sufficient for all demands. Later, when these lands are drained and turned into grain fields, the farmer will be compelled to look elsewhere for his supply of hay.

Fortunately there are many varieties of cultivated grasses and other fodder plants, that give profitable yields in this country. The most popular grass is "Timothy," this excellent grass is grown most extensively on the more moist soils of the Province, and returns on such soils are exceedingly good. Where "Timothy" fails to give large returns, Western Rye grass is grown with profit. This is an excellent native grass and is now extensively cultivated. In other districts where the soil is light "Austrian Brome" is grown with good results. Among the annual fodder plants the following are cultivated with success—German, Japanese and Common Millet, Broom, Corn and Hungarian grass, these all give excellent returns of useful hay.

#### **Corn Fodder Grows Big**

Although Indian corn is not grown for the grain, it is a decided success here as a fodder plant. When sown about the middle of May it grows rapidly during our long bright days, and soon reaches a height of from 8 to 10 feet, the yield often amounting to from 15 to 20 tons of green fodder per acre. This is either made into ensilage or stooked in the fields until required for feeding. Whether used as fodder or ensilage it is excellent for fattening cattle, and is one of the very best foods for milch cows.

A considerable portion of the best land in Manitoba is covered with small timber and scrub which, when cleared, produces magnificent yields of all kinds of farm produce, and the work of clearing is very light when compared with that of preparing the heavy timbered land of other countries. The method of clearing such lands is just to chop out the larger poplars and willows during the winter. A fire is then run over the land in order to burn the remaining portion of the scrub. After this the ground may easily be broken with a strong brush plough, all the additional levelling can be accomplished with a disc-harrow or other similar implement. The land is then ready for seeding, and usually yields large returns. Immense areas of this class of land are still open for settlement, principally in the northern part of the Province, and can be obtained either as free homesteads or for a nominal price.

In this country, where large areas of land are cultivated, it is necessary that all farm operations be expedited as much as possible. For this reason the most improved machinery is in use on all the up-to-date farms. As soon as the grain is fairly ripe, large grain-binders are set to work, and kept constantly in operation from dawn to sunset. Sometimes a score of these large machines, each drawn by four horses, are found following each other closely around one immense field, and in a few days, hundreds of acres of ripe grain are safely in the stook. The grain is allowed to cure for a few days, after which large threshing outfits, consisting of powerful steam traction engines and separators, are brought into the field where the threshing is done directly from the stook, and so quickly that only a few days intervene between the ripening of the grain and its delivery on the market. At the present time the prospects for agriculture in the Province are bright, the prices of farm products are high, the area under cultivation is increasing rapidly, and the employment of improved conditions of agriculture should result in larger returns than in former years.

#### **TO THE MANUFACTURER:**

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